environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Private Bag X 447 · PRETORIA · 0001 · Fedsure Building · 315 Pretorius Street · PRETORIA
Tel (+ 27 12) 310 3911 · Fax (+ 2712) 322 2682

NEAS Reference: DEAT/EIA/12186/2011
DEA Reference: 12/12/20/1928
Enquiries: Samkelisiwe Dlamini
Telephone: 012-395-1783 **Fax:** 012-320-7539 **E-mail:** sdlamini@environment.gov.za

Mr Hermann Oelsner
Oelsner Group (Pty) Ltd
P.O. Box 13
DARLING
7345

Fax no: 022-492-3096

PER FACSIMILE / MAIL

Dear Mr Oelsner

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998: GN R. 386/387: PROPOSED KERRIEFONTEIN AND DARLING PHASE 2 WIND FARM IN MALMESBURY WITHIN THE SWARTLAND LOCAL MUNICIPALITY OF THE WEST COAST DISTRICT MUNICIPALITY, WESTERN CAPE.

With reference to the above application, please be advised that the Department has decided to accept the EIR and to grant authorisation. The environmental authorisation (EA) and reasons for the decision are attached herewith.

Activities applied for as listed in GN R. 386 14 and 15 are no longer listed in terms of the new Regulations, 2010 and are thus not authorised.

In terms of regulation 10(2) of the Environmental Impact Assessment Regulations, 2010 (the Regulations), you are instructed to notify all registered interested and affected parties, in writing and within 12 (twelve) days of the date of the EA, of the Department's decision in respect of your application as well as the provisions regarding the submission of appeals that are contained in the Regulations.

Your attention is drawn to Chapter 7 of the Regulations, which prescribes the appeal procedure to be followed. This procedure is summarised in the attached document. Kindly include a copy of this document with the letter of notification to interested and affected parties.

Should the applicant or any other party wish to appeal any aspect of the decision a notice of intention to appeal must be lodged by all prospective appellants with the Minister, within 20 days of the date of the EA, by means of one of the following methods:
By facsimile: 012 320 7561;
By post: Private Bag X447,
Pretoria, 0001; or

By hand: 2nd Floor, Fedsure Building, North Tower,
cnr. Van der Walt and Pretorius Streets,
Pretoria.

If the applicant wishes to lodge an appeal, it must also serve a copy of the notice of intention to appeal on all registered interested and affected parties as well as a notice indicating where, and for what period, the appeal submission will be available for inspection, should you intend to submit an appeal.

Please include the Department *(Attention: Director: Environmental Impact Evaluation)* in the list of interested and affected parties, notified through your notification letter to interested and affected parties, for record purposes.

Appeals must be submitted in writing to:
Mr T Zwane, Senior Legal Administration Officer (Appeals) of this Department at the above mentioned addresses or fax number. Mr Zwane can also be contacted at:

Tel: 012-310-3929
Email: tzwane@environment.gov.za

The authorised activity/ies shall not commence within twenty (20) days of the date of signature of the authorisation. Further, please note that the Minister may, on receipt of appeals against the authorisation or conditions thereof suspend the authorisation pending the outcome of the appeals procedure.

Yours sincerely

Mr Ishaam Abader
Deputy Director-General: Environmental Quality and Protection
Department of Environmental Affairs
Date: 2/11/2011

CC:	Ms Sandra Rippon	Environmental Evaluation Unit, UCT	Tel: 021-650-02866	Fax: 021-650-3791
	Mr M. Schippers	Provincial Department of Environmental Affairs and Development Planning	Tel: 021-483-8349	Fax: 021-483-4372
	Mr T Zwane	Appeals Authority (DEA)	Tel: 012-310-3929	Fax: 012-320-7561

APPEALS PROCEDURE IN TERMS OF CHAPTER 7 OF THE NEMA EIA REGULATIONS, 2010 (THE REGULATIONS) AS PER GN R. 543 OF 2010 TO BE FOLLOWED BY THE APPLICANT AND INTERESTED AND AFFECTED PARTIES UPON RECEIPT OF NOTIFICATION OF AN ENVIRONMENTAL AUTHORISATION (EA)

APPLICANT	INTERESTED AND AFFECTED PARTIES (IAPs)
1. Receive EA from the relevant Competent Authority (the Department of Environmental Affairs [DEA])	1. Receive EA from Applicant/Consultant
2. Within 12 days of date of the EA notify all IAPs of the EA and draw their attention to their right to appeal against the EA in terms of Chapter 7 of the Regulations.	2. N/A
3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Water and Environmental Affairs (the Minister).	3. If you want to appeal against the EA, submit a notice of intention to appeal within 20 days of the date of the EA. with the Minister of Water and Environmental Affairs (the Minister).
4. After having submitted your notice of intention to appeal to the Minister, provide each registered IAP with a copy of the notice of intention to appeal within 10 days of lodging the notice	4. After having submitted your notice of intention to appeal to the Minister, provide the applicant with a copy of the notice of intention to appeal within 10 days of lodging the notice
5. The Applicant must also serve on each IAP: • a notice indicating where and for what period the appeal submission will be available for inspection.	5. Appellant must also serve on the Applicant within 10 days of lodging the notice, • a notice indicating where and for what period the appeal submission will be available for inspection by the applicant.
6. The appeal must be submitted in writing to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.	6. The appeal must be submitted to the Minister within 30 days after the lapsing of the period of 20 days provided for the lodging of the notice of intention to appeal.
7. Any IAP who received a notice of intention to appeal may submit a responding statement to that appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.	7. An Applicant who received notice of intention to may submit a responding statement to the appeal to the Minister within 30 days from the date that the appeal submission was lodged with the Minister.

NOTES:

1. **An appeal against a decision must be lodged with:-**
   a) the Minister of Water and Environmental Affairs if the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;
   b) the Minister of Justice and Constitutional Development if the applicant is the Department of Water Affairs and the decision was issued by the Director- General of the Department of Environmental Affairs (or another official) acting in his/ her capacity as the delegated Competent Authority;

2. **An appeal lodged with:-**
   a) the Minister of Water and Environmental Affairs must be submitted to the Department of Environmental Affairs;
   b) the Minister of Justice and Constitutional Development must be submitted to the Department of Environmental Affairs;

3. **An appeal must be:-**
   a) submitted in writing;
   b) accompanied by:
   - a statement setting out the grounds of appeal;
   - supporting documentation which is referred to in the appeal; and
   - a statement that the appellant has complied with regulation 62 (2) or (3) together with copies of the notices referred to in regulation 62.

environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

Environmental Authorisation

In terms of regulation 37 of the Environmental Impact Assessment Regulations, 2006

Kerriefontein and Darling Phase 2 Wind Farm in Malmesbury within the Swartland Local Municipality in the Western Cape Province.

West Coast District Municipality

Authorisation register number:	*12/12/20/1928*
NEAS reference number:	*DEA/NEAS/12186/2011*
Last amended:	*First issue*
Holder of authorisation:	*OELSNER GROUP (PTY) LTD*
Location of activity:	*WESTERN CAPE PROVINCE: in the Swartland Local Municipality on the farm Kerriefontein No. 555, Portion 0 and on the farm Slangkop No.552*

This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations, 2006 the Department hereby authorises –

OELSNER GROUP (PTY) LTD

with the following contact details –

Mr Hermann Oelsner
Oelsner Group (Pty) Ltd
P.O. Box 13
DARLING
7345

Tel: (022) 492 3095
Fax: (022) 492 3096
Cell: (083) 261 5301
E-mail: oelsnergrp@wcaccess.co.za

to undertake the following activities (hereafter referred to as "the activity"):

GN R. 386, 2006:

Item 1 (l): *The construction of facilities or infrastructure, including associated structures or infrastructure, for the transmission and distribution of electricity above ground with a capacity of more than 33 kilovolts and less than 120 kilovolts.*

Item 15: *The construction of a road that is wider than 4 metres or that has a reserve wider than 6 metres, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 metres long.*

GN R. 387, 2006:

Item 1 (a): *The construction of facilities or infrastructure, including associated structures or infrastructure, for the generation of electricity where (i) the electricity output is 20 megawatts or more; or (ii) the elements of the facility cover a combined area in excess of 1 ha.*

as described in the Environmental Impact Assessment Report (EIAR) dated September 2011 at:

Property	Latitude	Longitude
Farms Kerriefontein 555 and Slangkop 552	S33°31.5'88"	E18°26'16"

- for the proposed construction of the Kerriefontein and Darling Phase 2 Wind Farm on the farm Kerriefontein No 55, Portion 0 and the farm Slangkop No. 552 in Malmesbury within the Swartland Local Municipality of the West Coast District Municipality, Western Cape.

The infrastructure associated with this facility includes:

a. Slangkop (3/552)/Windhoek farm:
   - 5-6 Nordex turbines;
   - Underground cabling linking turbines to (existing) substation; and
   - Internal roads – stabilised dirt tracks to access each turbine.

b. Kerriefontein (0/555)

- 9-10 Nordex turbines;
- Underground cabling linking turbines to substation;
- Internal roads - stabilised dirt tracks to access each turbine;
- New 66/11 kV substation; and
- Direct connection with existing overhead power lines linking substation to national electricity grid (no new overhead power lines required).

Conditions

Scope of authorisation

1. The preferred technology N77 (option 1) assessed is approved.
2. Authorisation of the activity is subject to the conditions contained in this authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further authorisation in terms of the regulations.
6. This activity must commence within a period of three (3) years from the date of issue. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.
7. Commencement with one activity listed in terms of this authorisation constitutes commencement of all authorised activities.
8. This authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

9. Relevant legislation that must be complied with by the holder of this authorisation includes, *inter alia:*

- Archaeological remains, artificial features and structures older than 60 years are protected by National Heritage Resources Act, 1999 (Act 25 of 1999). Should any archaeological artefacts be exposed during excavation for the purpose of construction, construction in the vicinity of the finding must be stopped immediately. A registered Heritage Specialist must be called to the site for inspection. Under no circumstances shall any heritage material be destroyed or removed from the site and the relevant heritage resource agency must be informed about the finding. Heritage remains uncovered or disturbed during earthworks must not be disturbed further until the necessary approval has been obtained from the South African Heritage Resources Agency and/or any of their delegated provincial agencies.
- Relevant provisions of the Occupational Health and Safety Act, 1993 (Act 85 of 1993).
- Relevant provisions of the National Water Act, 1998 (Act 36 of 1998).
- Relevant provisions of the National Forests Act, 1998 (Act 84 of 1998).
- Relevant provisions of the National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004).
- Relevant provisions of the National Environmental Management: Protected Areas Act, 2003 (Act 57 of 2003) and its Regulations.
- Relevant provisions of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) and its Regulations.
- Relevant provisions of the Hazardous Substance Act, 1973 (Act 15 of 1973).
- Relevant Provisions of the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004).
- Relevant provisions of the Civil Aviation Act, 2009 (Act 13 of 2009).
- Should fill material be required for any purpose, the use of borrow pits must comply with the provisions of the Minerals and Petroleum Resources Development Act, 2002 (Act 28 of 2002) administered by the Department of Mineral Resources.

10. The holder of an environmental authorisation has the responsibility to notify the competent authority of any alienation, transfer and change of ownership rights in the property on which the activity is to take place.

Notification of authorisation

11. The holder of the authorisation must notify every registered interested and affected party, in writing and within 12 (twelve) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
12. The notification referred to must –

12.1. specify the date on which the authorisation was issued;

12.2. inform the interested and affected party of the appeal procedure provided for in Chapter 7 of the Environmental Impact Assessment (EIA) Regulations, 2010;

12.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and

12.4. give the reasons for the decision.

Management of the activity

13. The Environmental Management Plan (EMP) for the construction submitted as part of the application for environmental authorisation is hereby approved. This EMP must be implemented and adhered to.
14. The EMP is amendable and must be implemented and strictly enforced during all phases of the project. It shall be seen as a dynamic document and shall be included in all contract documentation for all phases of the development when approved.
15. Changes to the EMP, which are environmentally defendable, shall be submitted to this Department for acceptance before such changes could be effected.
16. The Department reserves the right to amend the EMP should any impacts that were not anticipated or covered in the EIR be discovered.
17. The provisions of the approved EMP including recommendations and mitigation measures in the EIR and specialist' studies shall be an extension of the conditions of this EA and therefore noncompliance with them would constitute noncompliance with the EA.

Monitoring

18. The applicant must appoint a suitably experienced independent Environmental Control Officer (ECO) for the construction phase of the development that will have the responsibility to ensure that

the mitigation/rehabilitation measures and recommendations referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMP.

19. The ECO shall be appointed before commencement of any authorised activity.
20. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
21. The ECO shall keep record of all activities on site, problems identified, transgressions noted and a task schedule of tasks undertaken by the ECO.
22. A detailed incident (including spillage of bitumen, fuels, chemicals, or any other material) and complaint register must be kept on site indicating how these issues were addressed, what rehabilitation measures were taken and what preventative measures were implemented to avoid re-occurrence of incidents/complaints.
23. In addition the ECO must maintain the following on site:

23.1. A daily site diary;

23.2. Copies of all reports submitted to the Department; and

23.3. A schedule of current site activities including the monitoring of such activities.

24. The ECO shall remain employed until all rehabilitation measures, as required for implementation due to construction damage, are completed and the site is ready for operation.
25. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

Recording and reporting to the Department

26. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this authorisation, must be submitted to the *Director: Compliance Monitoring* at the Department.
27. The holder of the authorisation must submit an environmental audit report upon completion of the construction and rehabilitation activities.
28. The environmental audit report must:

28.1. Be compiled by an independent environmental auditor;

28.2. Indicate the date of the audit, the name of the auditor and the outcome of the audit;

28.3. Evaluate compliance with the requirements of the approved EMP and this environmental authorisation;

28.4. Include measures to be implemented to attend to any non-compliances or degradation noted;

28.5. Include copies of any approvals granted by other authorities relevant to the development for the reporting period; and

28.6. Highlight any outstanding environmental issues that must be addressed, along with recommendations for ensuring these issues are appropriately addressed.

29. The audit report must be submitted prior to commencement of the operation phase of the project.

Commencement of the activity

30. The authorised activity shall not commence within twenty (20) days of the date of signature of the authorisation.

31. An appeal under section 43 of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended), does not suspend an environmental authorisation or exemption, or any provisions or conditions attached thereto, or any directive, unless the Minister, MEC or delegated organ of state directs otherwise.

32. The applicant must obtain a Water Use Licence from the Department of Water Affairs (DWA) prior to the commencement of the project should the applicant impact on any wetland or water resource. A copy of the license must be submitted to the *Director: Environmental Impact Evaluation* at the Department.

33. The applicant must submit a final layout plan for the entire energy facility for approval to the department before commencement of the activity. The layout should indicate the following:

- Turbine positions;
- Foundation footprint;
- Permanent laydown area footprint;
- Construction period laydown footprint;
- Internal roads indicating width (construction period width and operation period width) and with numbered sections between the other site elements which they serve (to make commenting on sections possible);
- Wetlands, drainage lines, rivers, stream and water crossing of roads and cables indicating the type of bridging structures that will be used;
- Sub-station(s) and/or transformer(s) sites including their entire footprint;
- Cable routes and trench dimensions (where they are not along internal roads);
- Connection routes to the distribution/transmission network;

- Cut and fill areas at turbine sites along roads and at sub-station/transformer sites indicating the expected volume of each cut and fill;
- Borrow pits;
- Spoil heaps (temporary for topsoil and subsoil and permanently for excess material);
- Buffer areas;
- Buildings including accommodation; and
- All "no-go" areas.

34. The final layout plan must also be superimposed (overlain) on an environmental sensitivity map to be submitted to the department.
35. The applicant must appoint a qualified botanical and fauna specialist to ground-truth every footprint and their recommendation must inform the final layout of the renewable energy facility and EMP to be submitted to the department for approval.

Notification to authorities

36. Fourteen (14) days written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence. This notification period may coincide with the period contemplated in 30 above.

Operation of the activity

37. Fourteen (14) days written notice must be given to the Department that the activity operational phase will commence.
38. The applicant must compile an operational EMP for the operational phase of the activity or alternatively, if the applicant has an existing operational environmental management system, it must be amended to include the operation of the authorised activity.

Site closure and decommissioning

39. Should the activity ever cease or become redundant, the applicant shall undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

Specific conditions

Avifauna and bats

40. A bird and bat monitoring programme must be implemented to document the effect of the operation of the energy facility on avifauna and bats. This should commence prior to construction, and continue during operation of the energy facility.
41. The results of the pre-construction bird monitoring programme must inform the final layout and the construction schedule of the energy facility.
42. Reports regarding bird monitoring must be submitted to the relevant provincial environmental department, Birdlife South Africa, the Endangered Wildlife Trust (EWT), Cape Nature and this Department on a quarterly basis. The report will assist all stakeholders in identifying potential and additional mitigation measures and to establish protocols for a bird monitoring programme for wind energy development in the country.
43. The baseline data collected and documented during the survey must be shared with the EWT, Cape Nature and Birdlife South Africa for a better understanding of the distribution or breeding behaviour of any of the priority species.
44. Habitat destruction must be kept to an absolute minimum by keeping the lay-down areas as small as possible, reducing the number and size/length or roads and reducing the final extent of the developed area.
45. Anti-collision devices such as bird flappers must be installed where power lines cross avifaunal corridors. The input of an avifaunal specialist must be obtained for the fitting of the anti-collision devices onto specific sections of the line once the exact positions of the towers have been surveyed and pegged. Flappers must be fitted in place so that they do not drift along the line and be readily and cost effectively installed on, or removed from the existing lines.
46. The applicant must ensure that lighting on the turbines is kept to a minimum and is coloured (red or green) and intermittent, rather than permanent and white, to reduce confusion effects for nocturnal migrants.
47. The facility must be designed to discourage the use of infrastructure components as perching or roosting substrates by birds and bats.

Vegetation, wetlands and water resources

48. All species of special concern (SSC) must be identified and every effort must be made to rescue them.

49. Vegetation clearing must be limited to the required footprint. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
50. Critical available biodiversity information must be consulted for the final placement of turbines and infrastructure.
51. The applicant must ensure that the continuous monitoring and removal of alien plant species is undertaken. An alien removal program must be developed and implemented.
52. A "Plant Rescue and Protection" plan which allows for the maximum transplant of conservation important species from areas to be transformed must be compiled by a vegetation specialist familiar with the site in consultation with the ECO. This plan must be implemented prior to commencement of the construction phase.
53. Before the clearing of the site, the appropriate permits must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF) for the removal of plants listed in the National Forest Act and from the relevant provincial department for the destruction of species protected in terms of the specific provincial legislation. Copies of the permits must be submitted to the Department for record keeping.
54. Construction activities must be restricted to demarcated areas to restrict impact on vegetation, birds and animals.
55. A comprehensive habitat rehabilitation plan must be developed for the site. Restoration must be undertaken as soon as possible after completion of construction activities to reduce the amount of habitat converted at any one time and to speed up the recovery to natural habitats.
56. All areas of disturbed soil must be reclaimed using only indigenous grass and shrubs. Reclamation activities should be undertaken as early as possible on disturbed areas.
57. All electrical collector lines must be buried in a manner that minimizes additional surface disturbance.
58. Topsoil from all excavations and construction activities must be salvaged and reapplied during reclamation.
59. The applicant is required to inform the relevant provincial department and/or this Department should the removal of protected species, medicinal plants and "data deficient" plant species be required.
60. All hard infrastructures should be located within existing areas of low sensitivity, as far as possible.
61. All turbines must be located at least 100m from the edge of any highly sensitive areas.
62. No exotic plants may be used for rehabilitation purposes; only indigenous plants of the area may be utilised.

63. No activities will be allowed to encroach into a water resource without a water use license being in place from the Department of Water Affairs.
64. Appropriate erosion mitigation must be implemented to prevent any potential erosion.
65. Cleared alien vegetation must not be dumped on adjacent intact vegetation during clearing but should be temporarily stored in a demarcated area.
66. Removal of alien invasive species or other vegetation and follow-up procedures must be in accordance with the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).
67. The applicant must ensure that all the "No-go" areas are clearly demarcated (using fencing and appropriate signage) before construction commences.
68. Contractors and construction workers must be clearly informed of the no-go areas.
69. Siting of turbines should adhere to >500m setbacks from large water bodies, riparian vegetation and rocky crevices, if and where high bat occurrence is found after monitoring.
70. Where roads pass right next to major water bodies provision should be made for fauna such as toads to pass under the roads by using culverts or similar.
71. Bridge design must be such that it minimise impact to the riparian areas with minimal alterations to water flow and must be permeable to movement of fauna and flora.
72. The proposed internal link road between the two turbine rows must be moved 150m to the east to minimise the impact on medium sensitivity vegetation in this area.
73. The landowners must refrain from grazing livestock in the high and medium sensitivity vegetation areas in the main winter, spring growing and flowering.

Roads and transportation

74. Existing road infrastructure must be used as far as possible for providing access to the proposed turbine positions. Where no road infrastructure exists, new roads should be placed within existing disturbed areas or environmental conditions must be taken into account to ensure the minimum amount of damage is caused to natural habitats.
75. A transportation plan must be developed, particularly for the transport of turbine components, main assembly cranes and other large pieces of equipment. A permit must be obtained from the relevant transport department for the transportation of all components (abnormal loads) to the sites.
76. A traffic management plan must be prepared for the site access roads to ensure that no hazards would results from the increased truck traffic and that traffic flow would not be adversely impacted.
77. Signs must be placed along construction roads to identify speed limits, travel restrictions, and other standard traffic control information. To minimize impacts on local commuter, consideration

should be given to limiting construction vehicles travelling on public roadways during the morning and late afternoon commute time.

78. Roads must be designed so that changes to surface water runoff are avoided and erosion is not initiated.
79. Internal access roads must be located away from drainage bottoms and avoid wetlands, if feasible.
80. Internal access roads must be located to minimize stream crossings. All structures crossing steams must be located and constructed so that they do not decrease channel stability or increase water velocity.
81. Existing drainage must not be altered, especially in sensitive areas.
82. A designated access to the site must be created and clearly marked to ensure safe entry and exit.
83. Signage must be erected at appropriate points warning of turning traffic and the construction site.
84. Construction vehicles carrying materials to the site should avoid using roads through densely populated built-up areas so as not to disturb existing retail and commercial operations.
85. Road borders should be regularly maintained to ensure that vegetation remains short and that they therefore serve as an effective firebreak.

Noise

86. Construction staff to be given training in actions to minimise noise impacts.
87. Noise from the turbines at the identified noise sensitive areas must be less than the 45dB(A) limit for rural areas presented in SANS10103.
88. The applicant must ensure that the National Noise Control Regulations and SANS10103:2008 are adhered to and reasonable measures to limit noise from the work site are implemented.
89. The applicant must ensure that the construction staff working in areas where the 8-hour ambient noise levels exceed 75dBA must wear ear protection equipment.
90. The applicant must ensure that all equipment and machinery are well maintained and equipped with silencers.
91. The applicant must provide a prior warning to the community when a noisy activity e.g. blasting is to take place.
92. All noisy construction operations should only occur during daylight hours if possible.
93. All wind turbines should be located at a setback distance of 500m from any homestead and a day/night noise criteria level at the nearest residents of 45dB(A) should be used to locate the turbines. The 500m setback distance can be relaxed if local factors; such as high ground between the noise source and the receiver, indicates that a noise disturbance will not occur.

94. Positions of turbines jeopardizing compliance with accepted noise levels should be revised during the micro-siting of the units in question and predicted noise levels re-modelled by the noise specialist, in order to ensure that the predicted noise levels are less than 45dB(A).

Visual resources

95. The applicant must reduce visual impacts during construction by minimising areas of surface disturbance, controlling erosion, using dust suppression techniques and restoring exposed soil as closely as possible to their original contour and vegetation.
96. A lighting engineer must be consulted to assist in the planning and placement of light fixtures in order to reduce visual impacts associated with glare and light trespass.
97. Signage on or near wind turbines should be avoided unless they serve to inform the public about wind turbines and their function.
98. Commercial messages and graffiti on turbines must be avoided.
99. Laydown areas and stockyards should be located in low visibility areas (e.g. valleys between ridges) and existing vegetation should be used to screen them from view where possible.
100. Night lighting of the construction sites should be minimised within the requirements of safety and efficiency.

Human health and safety

101. A health and safety programme must be developed to protect both workers and the general public during construction, operation and decommissioning of the energy facility. The programme must establish a safety zone for wind turbines from residences and occupied buildings, roads, right-of-ways and other public access areas that is sufficient to prevent accidents resulting from the operation of the wind turbines.
102. Potential interference with public safety communication systems (e.g. radio traffic related to emergency activities) must be avoided.
103. The applicant must ensure that the operation of the wind facility has minimal electromagnetic interference (EMI) (i.e. impacts to microwave, radio and television transmissions) and should comply with the relevant communication regulations.
104. The applicant must obtain a written permit or approval from the South Africa Civil Aviation Authority that the wind facility will not interfere with the performance of aerodrome radio Communication, Navigation and Surveillance (CNS) equipment especially the radar prior to commencement of the activity. The approval/permit must be submitted to the *Director: Environmental Impact Evaluation*.

105. The applicant must obtain approval from the South Africa Weather Services (WeatherSA) that the energy facility will not interfere with the performance of their equipment, especially radar, prior to commencement of the activity. The approval must be submitted to the *Director: Environmental Impact Evaluation.*
106. The applicant must train safety representatives, managers and workers in workplace safety. The construction process must be compliant with all safety and health measures as prescribed by the relevant act.
107. Liaison with land owners/farm managers is to be done prior to construction in order to provide sufficient time for them to plan agricultural activities. If possible, construction should be scheduled to take place within the post-harvest and pre-planting season, when fields are lying fallow.
108. No open fires for cooking or heating must be allowed on site.

Hazardous materials and waste management

109. Areas around fuel tanks must be bunded or contained in an appropriate manner as per the requirements of SABS 089:1999 Part 1.
110. Leakage of fuel must be avoided at all times and if spillage occurs, it must be remedied immediately.
111. Hazardous waste such as bitumen, oils, oily rags, paint tins etc. must be disposed of at an approved hazardous waste landfill site.
112. An effective monitoring system must be put in place during the construction phase of the development to detect any leakage or spillage of all hazardous substances during their transportation, handling, use and storage. The applicant must ensure that precautionary measures are in place to limit the possibility of oil and other toxic liquids from entering the soil or storm water system.
113. Streams, river, pans, wetlands, dams and their catchments and other environmental sensitive areas must be protected from the direct or indirect spillage of pollutants.
114. No dumping or temporary storage of any materials may take place outside designated and demarcated laydown areas, and these must all be located within areas of low environmental sensitivity.
115. Hazardous substances must not be stored where there could be accidental leakage into surface or subterranean water.
116. Hazardous and flammable substances must be stored and used in compliance to the applicable regulations and safety instructions. Furthermore, no chemicals must be stored nor may any vehicle

maintenance occur within 350m of the temporal zone of wetlands, a drainage line with or without an extensive floodplain or hillside wetlands.

117. Temporary bunds must be constructed around chemical storage to contain possible spills.

118. Spill kits must be made available on-site for the clean-up of spills.

119. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste shall be disposed of at a landfill licensed in terms of section 20(b) of the National Environment Management Waste Act, 2008 (Act 59 of 2008).

120. Temporary ablution facilities must be provided for staff at all times during the construction phase. The ablutions must be cleaned regularly with associated waste being disposed of at a registered/permitted waste site and must be removed from the site when the construction phase is completed.

Excavation and blasting activities

121. Underground cables and internal access roads must be aligned as much as possible along existing infrastructure to limit damage to vegetation and watercourses.

122. Foundations and trenches must be backfilled with originally excavated materials as much as possible. Excess excavation materials must be disposed of only in approved areas or, if suitable, stockpiled for use in reclamation activities.

123. Borrow materials must be obtained only from authorized and permitted sites.

124. Anti-erosion measures such as silt fences must be installed in disturbed areas.

Historical / cultural / paleontological resources

125. If there are any changes to the layout of the turbines, then additional survey work will be required in order to ensure that no sites are directly impacted and/or to identify the need for an excavation permit.

126. Should any graves be found, all construction activities must be suspended and an archaeologist be contacted immediately. The discovered graves must be cordoned off.

Storm water management

127. A comprehensive storm water management plan must be developed for the site to ensure compliance with applicable regulations and to prevent off-site migration of contaminated storm water or increased soil erosion. The comprehensive storm water management plan should form part of the EMP.

128. Construction must include appropriate design measures that allow surface and subsurface movement of water along drainage lines so as not to impede natural surface and subsurface flows. Drainage measures must promote the dissipation of storm water run-off.

Turbines position

129. Turbines must be positioned in such a way that shadow flicker does not affect any farm buildings.

General

130. A copy of this authorisation must be kept at the property where the activity will be undertaken. The authorisation must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the property.
131. Where any of the applicant's contact details change, including the name of the responsible person where the applicant is a juristic person, the physical or postal address and/or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
132. The holder of the authorisation must notify the Department, in writing and within 48 (forty eight) hours, if any condition of this authorisation cannot be or is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 and the regulations.
133. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the applicant or his successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the applicant with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.

Date of environmental authorisation: 2 November 2011

Mr Ishaam Abader

Deputy Director-General: Environmental Quality and Protection

Department of Environmental Affairs

Annexure 1: Reasons for Decision

1. Information considered in making the decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

a) The information contained in the EIR dated September 2011;

b) The comments received from Department of Environmental Affairs and Development Planning, the Department of Water Affairs and interested and affected parties as included in the EIR dated September 2011;

c) Mitigation measures as proposed in the EIR dated September 2011 and the EMP;

d) The information contained in the specialist studies contained in the EIR dated September 2011; and

e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act 107 of 1998).

2. Key factors considered in making the decision

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

a) Details provided of the qualifications of the EAP indicate that the EAP is competent to carry out the environmental impact assessment procedures.

b) The findings of all the specialist studies conducted and their recommended mitigation measures.

c) The EIR dated September 2011 included a description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed activity.

d) The EIR dated September 2011 identified all legislation and guidelines that have been considered in the preparation of the EIR dated September 2011.

e) The methodology used in assessing the potential impacts identified in the EIR dated September 2011 and the specialist studies have been adequately indicated.

f) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2006 for public involvement.

3. Findings

After consideration of the information and factors listed above, the Department made the following findings -

a) The identification and assessment of impacts are detailed in the EIR dated September 2011 and sufficient assessment of the key identified issues and impacts have been completed.

b) The procedure followed for impact assessment is adequate for the decision-making process.

c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.

d) The relevant legal and procedural requirements have been met.

e) The information contained in the EIR dated September 2011 is accurate and credible.

f) EMP measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the BAR and will be implemented to manage the identified environmental impacts during the construction process.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the proposed activity will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the proposed activity can be mitigated to acceptable levels. The application is accordingly granted.